

The Federal Home Loan Bank (FHLB) System and Selected Policy Issues

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The Federal Home Loan Bank Act of 1932 (FHLB Act; P.L. 72-304, 47 Stat. 128) created the Federal Home Loan Bank (FHLB) system, which was established to address frequent liquidity shortfalls, or cash flow disruptions, experienced by mortgage lenders during the Great Depression. Congress modified the FHLB system following the savings and loan (S&L) crisis of the 1980s, the 1986-1992 banking crisis, and the 2008 financial mortgage crisis. The FHLB system's primary function and mission, however, have remained intact:

- The FHLBs provide liquidity to participating mortgage market lenders in the form of *advances*, which are cash loans to their members. The advances are collateralized (secured) by members' assets, such as mortgages, mortgage-related assets, and certain small business loans. Because financial institutions typically borrow the funds that will be lent to their customers, FHLB members have an additional source to obtain short-term cash loans—namely, their district FHLB.
- The FHLBs support low- and moderate-income (LMI) mortgage lending and related community investments through various programs. The interest income earned by each FHLB from providing advances is used to support the affordable housing goals in its respective district. Each FHLB sets aside a percentage of its income to provide grants for low-income projects. The FHLBs also provide low-cost financing for economic development initiatives in low-income neighborhoods and certain other public projects.

The FHLB system currently consists of 11 institutions around the country and the system's Office of Finance, which collectively constitute one government-sponsored enterprise (GSE). The Office of Finance is the system's fiscal agent, and it issues and services the 11 FHLBs' debt securities (i.e., borrowings). It also compiles and publishes combined financial statements for the system.

The FHLBs are federally chartered *cooperative* financial institutions, meaning that each FHLB is privately owned and capitalized by its members. Four types of financial institutions are able to become FHLB system members: (1) federally insured depository institutions (i.e., banks and credit unions), (2) insurance companies, (3) community development financial institutions (CDFIs), and (4) nonfederally insured credit unions that meet certain statutory criteria. Members that have eligible mortgage and mortgage-related assets may use themas collateral for FHLB advances. Only members and certain eligible associates may receive FHLB services.

Given that Congress created the FHLBs to facilitate mortgage market liquidity, public policy discussions often consider the extent to which current operations allow the FHLB system to achieve its public mission. For example, many institutions that are eligible to join the FHLB system may not be principally engaged in residential mortgage finance, calling into question the extent to which FHLB advances to those institutions subsidize the funding of mortgages or the funding of member institutions' asset portfolios in general. In addition, financial entities arguably use FHLB advances and consolidated liabilities to replicate financial transactions and positions in order to comply with various prudential regulations. Under these scenarios, the FHLBs' lending activities might not directly promote greater mortgage financing activities of its members, even though the system does generate funds that are used to support some public mission goals.

By contrast, certain nonbank financial entities that primarily hold mortgages and mortgage-related assets are ineligible to become FHLB members, largely because they do not have either a federal or state prudential regulator. Furthermore, some mortgage-related assets cannot be used as collateral for FHLB advances (e.g., mortgage servicing rights). Hence, some nonbank firms, which do not collect federally insured deposits and may face greater liquidity risks relative to banks, are principally engaged in mortgage financing yet cannot join the FHLB system.

SUMMARY

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Contents

Introduction	1
Origins and Evolution of the Federal Home Loan Bank System	3
The Savings and Loan Crisis	4
Instability in the Commercial Banking Sector	6
The 2007-2009 Financial Crisis	7
Current Financial Structure and Public Mission	7
FHLB System Assets	8
FHLB System Liabilities	
Regulatory Capital and Liquidity Requirements	. 13
Mission Goals	. 16
Policy Issues	. 17
Mortgage Funding or General Wholesale Funding	. 18
Nonbanks and Captive Insurance Companies	
Collateral Eligibility Issues: Mortgage Servicing Rights, Guaranteed Portions of	
Small Business Administration Loans	. 25
Conclusion	. 26

Tables

Table 1. Some Requirements for FHLB Advances	9
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Contacts

Author	Information					26
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Introduction

The Federal Home Loan Bank Act of 1932 (FHLB Act; P.L. 72-304, 47 Stat. 128) created the Federal Home Loan Bank (FHLB) system. The system currently consists of 11 institutions and its Office of Finance, which collectively constitute one government-sponsored enterprise (GSE). The FHLBs are federally chartered *cooperative* financial institutions, meaning that each FHLB is privately owned and capitalized by its members.¹ Only members and certain eligible associates may receive FHLB services.²

The FHLB system was established to address frequent liquidity shortfalls, or cash flow disruptions, experienced by mortgage lenders during the Great Depression. Congress modified the FHLB system following the savings and loan (S&L) crisis of the 1980s, the 1986-1992 banking crisis, and the 2008 financial mortgage crisis. The FHLB system's primary function and mission, however, have remained intact:

- The FHLBs provide liquidity to participating mortgage market lenders in the form of *advances*, which are cash loans to their members. The advances are collateralized (secured) by members' assets, such as mortgages, mortgage-related assets, and certain small business loans. In general, financial institutions typically borrow the funds that they intend to lend to their customers. Depositories (i.e., banks and credit unions) can borrow from depositors, and depositories and nonbank financial firms can borrow in the short-term cash money markets. FHLB members have the additional option of obtaining advances from their district FHLB. (By contrast, Fannie Mae and Freddie Mac—other GSEs that support the market for residential and multifamily mortgage assets that meet certain eligibility requirements, as opposed to making shorter-term cash loans.³
- The FHLBs support low- and moderate-income (LMI) mortgage lending and related community investments through various programs. In addition to funding general operations, the interest income earned by each FHLB from providing advances is used to support the affordable housing goals in each respective district. Each FHLB is required to set aside a percentage of its income to provide grants for low-income projects. The FHLBs also provide low-cost financing for economic development initiatives in low-income neighborhoods and certain other public projects.

The Office of Finance is the FHLB system's fiscal agent. Just as financial institutions borrow the funds they will lend, the FHLB system borrows the funds it will lend to member institutions. The Office of Finance issues and services the debt securities (i.e., borrowings) for all 11 FHLBs, and it compiles and publishes combined financial statements for the system.

¹ Credit unions are also cooperatives that are owned by and make loans to their members. For more information, see CRS Report R46360, *The Credit Union System: Developments in Lending and Prudential Risk Management*, by Darryl E. Getter.

² See Federal Housing Finance Agency (FHFA), "Capital Stock Management," Advisory Bulletin (AB) 2019-03, August 15, 2019, at https://www.fhfa.gov/SupervisionRegulation/AdvisoryBulletins/Pages/Capital-Stock-Management.aspx.

³ For more information about Fannie Mae and Freddie Mac, see CRS Report R45828, *Overview of Recent Administrative Reforms of Fannie Mae and Freddie Mac*, by Darryl E. Getter.

An eligible financial institution that participates in housing finance markets may voluntarily join the regional FHLB serving the state where its home office or principal place of business is located. Four types of financial institutions are currently eligible for FHLB membership:⁴

- federally insured depositories—consisting of banks with Federal Deposit Insurance Corporation (FDIC) insured deposits and credit unions with National Credit Union Administration (NCUA) insured share deposits;
- insurance companies—regulated by state insurance regulators;
- community development financial institutions (CDFIs)—certified by the Department of the Treasury's (Treasury's) CDFI Fund—consisting of depositories, nonprofit financial institutions, and for-profit venture capital funds that primarily serve the financial needs of economically distressed people and places;⁵ and
- nonfederally insured credit unions that meet certain statutory criteria.⁶

A member institution receives cash advances and dividends on its FHLB's shares of capital stock. Because a member is both an FHLB customer and stockholder, the member's cash advances are less expensive relative to functionally equivalent repurchase agreements (also called "repos") obtained in the private capital markets; likewise, a member's dividend return is arguably comparable to the discounted pricing of FHLB advances to attain reasonable (as opposed to maximum) profitability.⁷

Because Congress created FHLBs to facilitate mortgage market liquidity, public policy discussions often consider the system's effectiveness at achieving the congressional intent. One concern is that many member institutions eligible to join the FHLB system may not be principally engaged in residential mortgage finance, calling into question the extent to which FHLB advances subsidize the funding of mortgages or the funding of member institutions' asset portfolios in general. By contrast, certain financial entities that primarily hold mortgages and mortgage-related assets are ineligible to be FHLB members. The policy debate, therefore, focuses on how closely the FHLBs' activities are linked with their public mission and implications regarding the potential risks for taxpayers.

This report summarizes the FHLB system and some recent policy issues. It begins with an overview of the financial challenges that prompted the creation and evolution of the FHLB system. It then describes the FHLB system's role as a financial intermediary, its prudential capitalization and liquidity requirements, and mission goals. This report then discusses policy issues concerning the extent to which current operations allow the FHLB system to achieve its public mission.

⁴ See FHFA, "Members of Federal Home Loan Banks," 81 *Federal Register* 3246-3288, January 20, 2016.

⁵ See Community Development Financial Institutions (CDFI) Fund, "What Does the CDFI Fund Do?," at https://www.cdfifund.gov/Pages/default.aspx.

⁶ See FHFA, "Federal Home Loan Bank Membership for Non-Federally-Insured Credit Unions," 82 *Federal Register* 106, June 5, 2017.

⁷ See Securities and Exchange Commission (SEC), *Form 10: Federal Home Loan Bank of New York*, at https://www.sec.gov/Archives/edgar/data/1329842/000095012305007994/y10017e10v12g.htm (hereinafter cited as SEC, *Form 10: FHLB of New York*). *Repos* are defined in the "Mortgage Funding or General Wholesale Funding" section.

Origins and Evolution of the Federal Home Loan Bank System

Prior to the creation of the Federal Housing Administration (FHA) in 1934, the lending terms of residential mortgages were structured to reduce financial risks borne by lenders and alleviate the funding constraints faced by small lenders with limited access to deposits. Residential mortgages typically were *balloon mortgages*, meaning that the principal amount did not amortize (i.e., decrease in regularly scheduled amounts over time); only interest payments were made over the loan life, and the last payment included the final interest payment and full principal balance.⁸ Before the FHA, lenders also required down payments of 50%-60%. Without credit scores and automated underwriting, borrowers were required to make large down payments to ensure they had a significant financial stake in the property asset, which would reduce lenders' default risk. Larger down payments also translated into smaller mortgage sizes, which reduced the amount of funds that small depository institutions needed to accumulate to make the loans.⁹

During periods of rising unemployment, particularly during the Great Depression, frequent deposit withdrawals led to cash flow disruptions and stymied lending.¹⁰ For-profit commercial banks, which were principally engaged in making commercial business loans, could turn to the Federal Reserve System—specifically, to the regional Federal Reserve bank where they were members—to obtain cash advances when experiencing cash shortfalls.¹¹ By pledging a performing asset (e.g., loan, bond) as collateral, a bank could obtain cash from its member regional Federal Reserve bank to ease funding needs.¹²

Savings and Loan (S&L) associations were not eligible to be members of the Federal Reserve System; they were nonprofit, member-owned cooperative financial institutions that relied on member savings deposits to fund residential home mortgages.¹³ Without access to a lender of last resort that could provide cash advances, S&L associations lacked a short-term funding alternative when cash liquidity shortfalls (funding gaps) emerged—specifically, when the demand for

⁸ Prior to the establishment of the Federal Housing Administration (FHA), most residential mortgages were nonamortizing and variable rate, with 6- to 11-year terms. The FHA encouraged the use of residential mortgages that were amortizing and fixed rate, with terms of 20 years or more. See U.S. Department of Housing and Urban Development (HUD), Office of Policy Development and Research, *Evolution of the U.S. Housing Finance System: A Historical Survey and Lessons for Emerging Mortgage Markets*, April 2006, at https://www.huduser.gov/publications/ pdf/US_evolution.pdf; and Edward Szymanoski et al., *The FHA Single-Family Insurance Program: Performing a Needed Role in the Housing Finance Market*, HUD, Office of Policy Development and Research, Working Paper no. HF-019, December 2012, at https://www.huduser.gov/portal/publications/FHA_SingleFamilyIns_2012.pdf.

⁹ For example, U.S. restrictions on interstate and branch banking, as well as eligibility requirements to become credit union members, limited the ability of depository firms to collect deposits that were used to make loans. For more information, see David L. Mengle, *The Case for Interstate Branch Banking*, Federal Reserve Bank of Richmond, *Economic Review* (November/December 1990), at https://www.richmondfed.org/-/media/richmondfedorg/publications/ research/economic_review/1990/pdf/er760601.pdf.

¹⁰ Federal Deposit Insurance Corporation (FDIC), "Historical Timeline," at https://www.fdic.gov/about/history/timeline/1930s.html.

¹¹ Federal Reserve Act of 1913 (P.L. 63-43, 38 Stat. 251). Only commercial banks could be members of the Federal Reserve System and use the discount window to obtain cash advances.

¹² Commercial banks with access to the Federal Reserve System discount window could use commercial or business loans as eligible collateral for advances. See James A. Clouse, "Recent Developments in Discount Window Policy," *Federal Reserve Bulletin*, November 1994, pp. 965-977 (hereinafter Clouse, "Recent Developments in Discount Window Policy," 1994).

¹³ Savings and loan (S&L) associations are also referred to as thrifts or thrift institutions.

mortgage loans outpaced the amount of their deposit holdings.¹⁴ Congress responded in 1932 by creating the FHLB system, analogous to the Federal Reserve System, to provide short-term cash advances to S&L associations. The FHLB system initially consisted of 12 regional, member-owned and federally chartered banks, each with its own board of directors. The initial 12 regional FHLBs were located in Atlanta, GA; Boston, MA; Chicago, IL; Cincinnati, OH; Dallas, TX; Des Moines, IA; Indianapolis, IN; New York, NY; Pittsburgh, PA; San Francisco, CA; Seattle, WA; and Topeka, KS. These original FHLBs were given the authority to provide cash advances to federally chartered S&L members at a discounted rate. The eligible collateral for FHLB advances consisted primarily of residential mortgage assets held in the portfolios of member S&L associations, thus promoting a housing finance mission. The profits would be distributed back to member institutions largely in the form of more favorable rates for advances (compared with those offered in the short-term money markets), as well as dividends on the stock shares owned by the cooperative member institutions.

The Federal Home Loan Bank Board (FHLBB) initially headed the FHLB system and was given the authority to regulate and supervise S&L associations.¹⁵ Congress also created the Federal Savings and Loan Insurance Corporation (FSLIC) to insure the deposits collected by S&L associations; the FSLIC was also under the guidance of the FHLBB.¹⁶ Congress enacted the Emergency Home Finance Act of 1970 (P.L. 91-351, 84 Stat 450) to create the Federal Home Loan Mortgage Corporation, which now uses the name Freddie Mac, as a wholly owned subsidiary of the FHLB system to provide liquidity by purchasing conventional mortgages from the system's members (i.e., the S&L associations).¹⁷ The FHLB system remained largely intact for several decades until changes were made following the S&L crisis of the 1980s, the 1986-1992 commercial banking section crisis, and the 2008 financial mortgage crisis.¹⁸

The Savings and Loan Crisis

During the late 1970s and early 1980s, rising inflation and interest rates prompted depositors to withdraw funds from their savings accounts with regulated interest rate caps and deposit them in unregulated accounts, such as those offered by money market mutual funds, to earn higher

¹⁴ S&L associations were not able to join the Federal Reserve System until after the passage of the Depository Institutions Deregulation and Monetary Control Act of 1980 (P.L. 96-221). See Clouse, "Recent Developments in Discount Window Policy," 1994, pp. 965-977.

¹⁵ Under the Federal Home Loan Bank Board's guidance, the regional FHLBs provided regulatory oversight for their S&L members.

¹⁶ The National Housing Act of 1934 (P.L. 73-479, 49 Stat. 684) created the Federal Savings and Loan Insurance Corporation (FSLIC)—analogous to the FDIC. The FDIC insured deposits only for the commercial banking system at that time. In 1989, the FDIC assumed responsibility for the bankrupt fund as the Savings Association Insurance Fund (SAIF). After passage of the Federal Deposit Insurance Reform Act of 2005 (P.L. 109-171, 120 Stat. 9), the FDIC merged the Bank Insurance Fund for commercial banks and the SAIF to form the Deposit Insurance Fund, which became effective on March 31, 2006. See FDIC, "Deposit Insurance Fund: Merger of Bank Insurance Fund and Savings Association Insurance Fund," FIL-36-2006, April 27, 2006, at https://www.fdic.gov/news/news/financial/2006/fil06036.html.

¹⁷ Fannie Mae was restricted to secondary market trading of federally insured mortgages, working primarily with mortgage bankers rather than with S&L lenders. For more information, see CRS Report R45828, *Overview of Recent Administrative Reforms of Fannie Mae and Freddie Mac*, by Darryl E. Getter.

¹⁸ See George J. Gaberlavage, *The Federal Home Loan Bank System: A Chronological Review and Discussion of Key Issues*, Consumer Federation of America, June 2017, at https://consumerfed.org/wp-content/uploads/2017/06/6-14-17-FHLB_Report.pdf.

yields.¹⁹ Many S&L associations became insolvent following the deposit runoff, which contributed to the FSLIC's insolvency.²⁰

Further evolution of the FHLB system resulted from Congress's response to the S&L crisis, particularly passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA; P.L. 101-73, 103 Stat. 83). FIRREA made the following changes:

- abolished the FHLBB and replaced it with the Federal Housing Finance Board as the FHLB system's primary regulator;
- shifted the regulatory and deposit insurance functions for the remaining S&L associations to the Office of Thrift Supervision (and to the FDIC for savings banks);²¹
- removed Freddie Mac from the FHLB system and reconstituted it as a publicly owned stock corporation;²²
- expanded FHLB membership, allowing all federally insured depository institutions membership in the FHLB system as long as at least 10% of their assets were mortgages; and
- required at least 10% of each FHLB's net earnings be set aside to (1) provide funding for LMI housing programs and (2) repay the expenses incurred to reimburse insured S&L depositors, discussed in the textbox below.

¹⁹ Regulation Q interest rate ceilings, stemming from the Banking Act of 1933 (48 Stat. 162) and the Banking Act of 1935 (49 Stat. 684), capped the interest that could be paid on savings deposits. See Timothy Q. Cook, "Regulation Q and the Behavior of Savings and Small Time Deposits at Commercial Banks and the Thrift Institutions," Federal Reserve Bank of Richmond, *Economic Review* (November/December 1978), at https://www.richmondfed.org/-/media/richmondfedorg/publications/research/economic_review/1978/pdf/er640602.pdf; R. Alton Gilbert, "Requiem for Regulation Q: What It Did and Why It Passed Away," Federal Reserve Bank of St. Louis, *Review*, vol. 68, no. 2 (February 1986), at https://files.stlouisfed.org/files/htdocs/publications/review/86/02/Requiem_Feb1986.pdf; Paul Calem, "The New Bank Deposit Markets: Goodbye to Regulation Q," Federal Reserve Bank of Philadelphia, *Business Review* (November/December 1985), at http://www.philadelphiafed.org/research-and-data/publications/business-review/1985/brnd85pc.pdf; R. Alton Gilbert, "Will the Removal of Regulation Q Raise Mortgage Interest Rates?" Federal Reserve Bank of St. Louis, *Review* (December 1981), at http://research.stlouisfed.org/publications/review/81/12/Removal_Dec1981.pdf; and Charlotte E. Ruebling, "The Administration of Regulation Q," Federal Reserve Bank of St. Louis, *Review* (February 1970), at http://research.stlouisfed.org/publications/review/70/02/

Administration_Feb1970.pdf. For information on the S&L crisis, see Alane K. Moysich, "Chapter 4: The Savings and Loan Crisis and Its Relationship to Banking," FDIC, *History of the 80s: An Examination of the Banking Crises of the 1980s and Early 1990s*, December 1997, at http://www.fdic.gov/bank/historical/history/167_188.pdf; and FDIC, "The S&L Crisis: A Chrono-Bibliography," at https://www.fdic.gov/bank/historical/sandl/.

 $^{^{20}}$ Even without Regulation Q caps on depository accounts, S&L associations would have experienced financial distress had they attempted to pay depositors' short-term interest rates, which had risen to levels that exceeded the long-term fixed interest rate yields attached to mortgages held in their lending portfolios.

²¹ The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act; P.L. 111-203) abolished the Office of Thrift Supervision, transferring its authority and duties to the Federal Reserve, Office of the Comptroller of the Currency (OCC), and FDIC.

²² The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (P.L. 101-73, 103 Stat. 83) also eliminated the separate missions of Fannie Mae and Freddie Mac, making their characteristics and missions similar today.

Resolving Troubled Savings and Loan (S&L) Associations and Repaying Expenses

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA; P.L. 101-73, 103 Stat. 83) created the Resolution Trust Corporation (RTC), a temporary federal agency established to act as a conservator and receiver of insolvent S&L associations following the insolvency of the Federal Savings and Loan Insurance Corporation. The RTC's principal funding source to cover expenses was raised by an off-budget entity, the Resolution Funding Corporation (REFCORP). FIRREA created REFCORP to issue \$30 billion in Treasury bonds, and the Federal Home Loan Bank (FHLB) system was required to make annual interest payments of \$300 million on those bonds.²³ The RTC, which existed from August 1989 to December 1995, resolved 531 insolvent institutions.²⁴

The Gramm-Leach-Bliley Act (P.L. 106-102, 113 Stat. 1338) altered and simplified the required obligation of the system's contribution to the old REFCORP debt. Rather than a fixed \$300 million, each FHLB was required to pay 20% of net earnings—after making payments to the system's Affordable Housing Programs—to help repay interest on bonds issued by REFCORP, raising the likelihood that payments would be sufficient to *defease* or prepay the debt ahead of schedule. On July 15, 2011, the Federal Housing Finance Agency determined that the FHLBs had repaid the REFCORP obligation and would no longer be required to make contributions.²⁵

Instability in the Commercial Banking Sector

The commercial banking sector also experienced periods of instability. Regional downturns in Texas and New England led to the failure of approximately 1,000 commercial banks during the 1986-1992 period.²⁶ In the 1992-1999 period, commercial banks experienced funding gaps.²⁷ Although the Federal Reserve's discount window is used primarily as an emergency funding source, further modifications to the FLHB system resulted in a permanent nonemergency funding source for banks.²⁸

Specifically, Congress passed the Federal Home Loan Bank System Modernization Act of 1999, Title VI of the Gramm-Leach-Bliley Act (GLBA; P.L. 106-102, 113 Stat. 1338), which made additional changes.

²³ See Federal Housing Finance Board (FHFB), "Determination of Appropriate Present -Value Factors Associated with Payments Made By the Federal Home Loan Banking System to the Resolution Funding Corporation," 65 *Federal Register* 5447-5453, February 4, 2000.

²⁴ See FDIC, Managing the Crisis: The FDIC and RTC Experience, Volume 1, December 1997, at https://www.fdic.gov/bank/historical/managing/documents/history-consolidated.pdf. The Financing Corporation (FICO) was established to issue bonds after passage of the FSLIC Recapitalization Act of 1987 (P.L. 100-86, 101 Stat 552). The Deposit Insurance Funds Act of 1996 (P.L. 104-208) authorized the FDIC to collect a special assessment on banks and savings banks to pay interest on the FICO bonds. Outstanding FICO bonds matured from 2017 through 2019. For more information, see FDIC, "FICO Assessment," at https://www.fdic.gov/deposit/insurance/risk/ asseste.html.

²⁵ See FHFA, FHFB, and HUD Office of Federal Housing Enterprise Oversight, "Repeal of Regulations," 76 *Federal Register* 74648-74649, December 1, 2011.

²⁶ See Eliana Balla et al., *Did Banking Reforms of the Early 1990s Fail? Lessons from Comparing Two Banking Crises*, Federal Reserve Bank of Richmond, *Economic Brief*, no. 15-06, June 2015, at https://www.richmondfed.org/-/media/ richmondfedorg/publications/research/economic_brief/2015/pdf/eb_15-06.pdf; and FDIC, "Managing the Crisis: The FDIC and RTC Experience—Chronological Overview," at https://www.fdic.gov/bank/historical/managing/ chronological/1990.html.

²⁷ See Dusan Stojanovic, Mark D. Vaughan, and Timothy J. Yeager, "Do Federal Home Loan Bank Membership and Advances Increase Bank Risk-Taking?," *Journal of Banking & Finance*, vol. 32, no. 5 (May 2008), pp. 680-698 (hereinafter Stojanovic, Vaughan, and Yeager, "Do FHLB Membership and Advances Increase Bank Risk-Taking?," 2008).

²⁸ The Federal Reserve's discount window is designed to provide emergency short-term funding. For more information, see the textbox in the "Mortgage Funding or General Wholesale Funding" section.

- The GLBA reduced barriers that had prevented more commercial banks from joining the FHLB system. Because commercial banks' lending portfolios historically contained smaller percentages of residential mortgages relative to thrifts, the GLBA removed the minimum mortgage asset requirement of 10% for membership. In addition, the GLBA gave FHLBs the ability to make advances secured by collateral other than mortgage loans—specifically, agricultural and small business loans.
- In light of concerns that banks could withdraw their memberships with only sixmonths' notice and leave an FHLB insufficiently capitalized, the GLBA required a more permanent and risk-based capital structure for the system, discussed in the "Regulatory Capital and Liquidity Requirements" section.²⁹

The 2007-2009 Financial Crisis

During the 2007-2009 financial crisis and concurrent "Great Recession," numerous financial institutions experienced distress following a sharp rise in the percentage of nonperforming U.S. mortgage loans. For example, Washington Mutual (WaMu) was an S&L association principally engaged in residential mortgages, and it accounted for approximately one-third of the lending by the FHLB of Seattle.³⁰ In 2007, WaMu experienced loan losses, borrowing capacity limitations, and a significantly depressed stock price.³¹ In September 2008, WaMu became insolvent and was placed into receivership by the FDIC. The FHLB of Seattle then became undercapitalized and was merged with the FHLB of Des Moines on May 31, 2015, leaving 11 FHLBs.³²

Congress passed the Housing and Economic Recovery Act of 2008 (HERA; P.L. 110-289) that, among other things, created the Federal Housing Finance Agency (FHFA). The FHFA became the prudential regulator for all the housing GSE systems, replacing the Federal Housing Finance Board and the Office of Federal Housing Enterprise Oversight (under the Department of Housing and Urban Development), which had been the safety and soundness regulator for Fannie Mae and Freddie Mac.

Current Financial Structure and Public Mission

The FHLBs are financial intermediaries that, similar to depositories, match savers with borrowers. Under a traditional intermediation business model, a firm borrows funds from savers (e.g., depositors) and uses those funds to originate longer-term consumer and commercial business loans. Consumers and businesses pay higher interest rates for loans with longer maturities relative to the lower interest rates intermediaries pay for successive sequences of loans (e.g., recurring deposits) for shorter periods of time. *Lending spreads*, or profits, are computed as

²⁹ See U.S. Government Accountability Office (GAO), *Federal Home Loan Bank: An Overview of Changes and Current Issues Affecting the System*, GAO-489T, April 13, 2005, at https://www.govinfo.gov/content/pkg/GAOREPORTS-GAO-05-489T/html/GAOREPORTS-GAO-05-489T.htm.

³⁰ See Drew DeSilver, "Seattle's Federal Home Loan Bank in Big Money Trouble Again," *The Seattle Times*, July 19, 2009, at https://www.seattletimes.com/business/seattles-federal-home-loan-bank-in-big-money-trouble-again/ (hereinafter DeSilver, "Seattle's FHLB in Big Money Trouble Again," 2009).

³¹ See Offices of Inspector General, Department of the Treasury (Treasury) and FDIC, *Evaluation of Federal Regulatory Oversight of Washington Mutual Bank*, Report no. EVAL-10-002, April 2010, at https://www.fdicoig.gov/publications/reports10/Eval-10-002-508.shtml.

³² See FHFA Office of the Inspector General, *Merger of the Federal Home Loan Banks of Des Moines and Seattle: FHFA 's Role*, WPR-2016-002, March 16, 2016, at https://www.fhfaoig.gov/sites/default/files/WPR-2016-002.pdf.

the difference between the asset returns (yields) that accrue from holding longer-term loans minus the costs of its liabilities, consisting primarily of shorter-term loans.

The FHLBs' financial lending spreads contain various risks.

- Financial assets in the form of loans and bonds have *interest rate risk*, meaning that their market values fluctuate with changes in interest rates.
- Loans and bonds have *credit (default) risk*, which occurs when borrowers fail to repay the principal loan amounts and interest obligations.
- Some loans, such as residential mortgages, have *prepayment risk* or the risk that borrowers may repay their loans ahead of schedule, reducing the expected yield of the asset.
- Financial institutions face *liquidity risk*, or the risk of not being able to sell assets, obtain (short-term) funding for existing assets, or make payment obligations in a timely manner for their full value.
- Depositories face *funding risk* when the difference between the longer-term (fixed-rate) yields on assets and the short-term variable rates paid to borrow the cash necessary to fund the assets shrinks, reducing profitability.

Because the inherent risks generated by lending spreads are retained on their balance sheets, intermediaries generally must comply with capital and liquidity requirements. This section explains the composition of the FHLBs' lending spreads, their prudential capital and liquidity requirements, and their public mission goals.

FHLB System Assets

The primary assets owned by each FHLB are advances, which are the cash loans to members that must be collateralized or secured at all times with pledged mortgages or other eligible assets.³³ The advances are for amounts that are less than the value of the collateral assets, and the difference between the value of the pledged collateral and the advance is called a *haircut*.³⁴ Haircuts, which vary by the type of collateral pledged and whether the institution is a depository or insurance company, protect the lending FHLB against financial loss if a borrowing member defaults on an advance.³⁵ The FHLBs do not allow members to pledge loans that would violate

³³ The collateral assets pledged for advances are not reported on an FHLB's balance sheet, which is consistent with the Financial Accounting Financial Standards Board ASC 310 guidance for receivables arising from credit sales. See FHFA, *Advances and Collateral*, October 2014, at https://www.fhfa.gov/SupervisionRegulation/Documents/Advances-and-Collateral-Module_2014_revision12015.pdf (hereinafter FHFA, *Advances and Collateral*, 2014); and Financial Accounting Standards Board, "Receivables (Topic 310): Disclosures about the Credit Quality of Financing Receivables and the Allowance for Credit Losses," *Accounting Standards Update*, no. 2010-20, July 2010, at https://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1176157125490&acceptedDisclaimer=true.

³⁴ Obtaining a loan at a haircut or for less than the value of a pledged collateral asset is similar to obtaining a mortgage for less than the full value of a house, which occurs when a home buyer makes a down payment. Default incentives are abated when borrowers forfeit a collateral asset of higher value relative to the outstanding loan. The haircut differs from the advance rate, which is the interest cost, charged for an FHLB advance. Suppose a bank pledges an asset worth \$100 for a cash advance of \$90 while promising to repay the loan in full at a 10% advance rate—the haircut on the pledged asset would be \$10, and the advance rate charged to the bank would be \$9 for a total repayment of \$99 for a \$90 loan. See Gary B. Gorton and Andrew Metrick, *Securitized Banking and the Run on Repo*, National Bureau of Economic Research (NBER), Working Paper no. 15223, August 2009, at https://www.nber.org/papers/w15223.

 $^{^{35}}$ For example, using a Treasury security would result in a lower haircut relative to a mortgage loan. The FHLBs provide *lendable collateral values* (LCVs), where an LCV = 100% - percentage of haircut, for institutions by type and by type of qualifying collateral. For more information, see FHLB of Atlanta, *Member Products and Services Guide*,

any federal, state, or local antipredatory lending laws. The FHLBs may ban all loans that meet the definition of a high-cost loan, as established in the Home Ownership Equity and Protection Act of 1994.³⁶ **Table 1** lists some—but perhaps not all—underwriting criteria, eligible collateral that members are required to pledge for advances, and ineligible collateral. Each FHLB may have variations and allowable exceptions to the items listed.³⁷ **Table 1**, therefore, provides a general overview, but the lending policies of each FHLB should be reviewed independently.³⁸

Examples of Underwriting Criteria for Member Institutions	Examples of Eligible Collateral for Advances	Examples of Ineligible Collateral for Advances
Overall financial condition, including quality of assets and capitalization	Whole first mortgage loans on improved residential property	Vacant real properties
Overall financial condition of subsidiaries and affiliates	Debt instruments issued or guaranteed by the U.S. government or any of its agencies	Tax credits or warrants
Quality of the eligible collateral	Mortgage-backed securities (MBS) issued or guaranteed by Freddie Mac, Fannie Mae, or Ginnie Mae	Mortgage servicing rights

Table 1. Some Requirements for FHLB Advances

June 10, 2020, at https://corp.fhlbatl.com/files/documents/member-products-and-services-guide.pdf. Some FHLBs may use the term *lendable value rate* instead of LCV. See FHLB of Cincinnati, *Advance Forward: Annual Meeting Webinar*, May 14, 2020, at https://www.fhlbcin.com/media/2965/transcript-annual-meeting.pdf.

³⁶ P.L. 90-90–321, Title I, §129, as added to P.L. 103-103–325, Title I, §152(d). The Home Ownership Equity and Protection Act of 1994 was enacted as an amendment to the Truth-In-Lending Act of 1968, requiring additional disclosures of mortgage terms to consumers. For more information, see FHFA, *Report on Federal Home Loan Bank Collateral for Advances and Interagency Guidance on Nontraditional Mortgage Products*, July 2009, at https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/

FHLBank% 20 Collateral% 20 for% 20 Advances% 20 and% 20 Interagency% 20 Guidance% 20 on% 20 Nontraditional% 20 Mortgage% 20 Products.pdf.

³⁷ For example, policies regarding participation loans may vary by FHLB. *Participation loans* are loans provided by two or more financial institutions. One institution may originate and retain a larger share of financial interest in a loan while selling one or more smaller shares to other financial institutions. In this case, the loan would not be considered *whole* because other shareholders have financial interests. Some FHLBs may prefer whole loans as collateral, which would be free and clear of any other interests in case they need to be liquidated. Some FHLBs may allow participation loans as collateral under certain circumstances, such as to support certain multifamily and community developments. Some FHLBs may have allowed participation loans to be pledged as collateral in the past but have since revised their policies. For more information, see SEC, "Federal Home Loan Bank of Atlanta Credit and Collateral Policy, As Amended" at https://www.sec.gov/Archives/edgar/data/1331465/000119312507180530/dex101.htm (hereinafter SEC, "FHLB of Atlanta Credit and Collateral Policy, As Amended"); FHLB of Des Moines, "Participation Loan Guidance," February 2020, at https://www.fhlbdm.com/webres/File/member-support/collateral/guidelines-for-pledging-participation-loan-guidelines.pdf; SEC, *Form 10: FHLB of New York*; and FHFA, *2009 Annual Report to Congress*, May 10, 2010, at https://www.fhla.gov/AboutUs/Reports/ReportDocuments/2009_AnnualReportToCongress_508.pdf.

³⁸ The items listed in **Table 1** were retrieved primarily from SEC, "FHLB of Atlanta Credit and Collateral Policy, As Amended"; FHLB of Boston, *Products and Solutions Guide*, at http://www.fhlbboston.com/downloads/ productsandservices/productspolicy/productsSolutionsGuide.pdf; FHLB of Des Moines, *Collateral Procedures*, April 2020, at https://www.fhlbdm.com/webres/File/member-support/collateral/Collateral_Procedures.pdf; and SEC, *Form 10: FHLB of New York*.

Examples of Underwriting Criteria for Member Institutions	Examples of Eligible Collateral for Advances	Examples of Ineligible Collateral for Advances
Strategic reason for borrowing (e.g., whether the loaned funds would be used to purchase safer or riskier securities relative to the asset used to collateralize the loan)	Certain home equity loans and lines of credit, first mortgage loans on commercial real estate, private-label MBS backed by first mortgage loans, and commercial MBS may be considered if they meet certain criteria	Non-real estate real property including, but not limited to, houseboats and manufactured homes not deemed real property by applicable state laws
_	Cash deposited at a member Federal Home Loan Bank (FHLB)	Financial institution stock; privately held/unregistered stock
_	Small business, small agribusiness, and small farm loans from member community financial institutions	Loans with borrower collateral defeasance options
_	_	Loans that would violate any predatory lending laws.

Source: Congressional Research Service, using information obtained from the FHLBs of Atlanta, GA; Boston, MA; Des Moines, IA; and New York, NY.

The FHLBs "perfect" their security interests of the collateral asset used for advances via their statutory superlien authority, meaning that the asset cannot be claimed by any other party.³⁹ An FHLB also may require physical delivery of the collateral asset. For example, if a member depository institution were to experience large loan losses and become insolvent and placed into receivership, then the FDIC or NCUA—as the receivers—would collect the financial assets of the insolvent bank or credit union, respectively, and attempt to sell them to other depositories.⁴⁰ The proceeds would be used to reimburse depositors. The FHLB's superlien authority, however, gives it priority on pledged collateral assets over any and all other creditors, including the FDIC and NCUA. Should a member fail, the FHLB can sell the pledged collateral to reimburse itself for the principal and the interest amounts owed.⁴¹

FHLB advances may range from overnight to 30 years and can be customized to fit members' financial needs. For example, some advances contain *callable*, *putable*, or *convertible* option features.⁴² A callable advance gives a member the option to repay an advance ahead of schedule (on specific dates) without prepayment penalties. Aputable advance allows a member to obtain a low fixed interest rate advance; but the lending FHLB has the option to "put the advance," meaning that the member must repay an outstanding advance or obtain another one at existing market prices at the time the option is exercised.⁴³ Members may obtain advances with the option to convert from fixed to floating advance rates (and vice versa). These features may further enhance the use of advances as a cash management tool to reduce funding risk—especially for

³⁹ See 12 U.S.C. §1430. Because the FHLBs' superlien authority was established under the Competitive Equality Banking Act of 1987 (P.L. 100-86), it may be referred to as the CEBA lien. See FHFA, *Advances and Collateral*, 2014.

⁴⁰ See CRS Report R41718, Federal Deposit Insurance for Banks and Credit Unions, by Darryl E. Getter.

⁴¹ See GAO, *Federal Home Loan Bank System: Key Loan Pricing Terms Can Differ Significantly*, GAO-03-937, September 8, 2003, at https://www.govinfo.gov/content/pkg/GAOREPORTS-GAO-03-973/html/GAOREPORTS-GAO-03-973.htm.

⁴² See FHLB of Atlanta, "Types of Advances We Offer," at https://corp.fhlbatl.com/services/advances/.

⁴³ See FHLB of Indianapolis, "Putable Advances," at https://www.fhlbi.com/products-services/credit-products/ advances/putable-advances; and SEC, *Form 10, Federal Home Loan Bank of Chicago*, March 31, 2005, at https://www.sec.gov/Archives/edgar/data/1331451/000119312505135678/d1012g.htm.

members holding assets with adjustable rates. FHLB advances with option-like features may also be less expensive relative to some private market interest rate derivative products, which may benefit small depositories that lack sufficient volumes to reduce their costs per transaction.⁴⁴

FHLBs also lend federal funds to depository institutions in the overnight federal funds market.⁴⁵ Federal funds are excess cash reserves that depositories may lend to each other, usually overnight or for several days. Lending federal funds typically does not require collateral, causing them to be slightly more expensive relative to collateralized (secured) advances. The pricing difference, therefore, reflects the credit risk difference between secured and unsecured lending.

In addition to advances and loans of federal funds, other FHLBs' assets include mortgages that have been purchased from their members; mortgage-backed securities (MBS) issued by Freddie Mac and Fannie Mae; securities issued by the U.S. government and its agencies (e.g., Ginnie Mae⁴⁶ and federally backed student loan asset-backed securities); and certain private-label MBS.⁴⁷ FHLBs typically purchase assets in the secondary market, that is, after the loans have been originated and then sell assets to each other or their member institutions. These assets purchases can also facilitate the liquidity for mortgages and mortgage-related assets.

FHLBs face some investment restrictions. For example, they are prohibited from trading securities for speculative purposes or market-making activities. FHLBs also cannot invest in noninvestment grade debt instruments, and they generally may not invest in certain types of securities or loans that would represent an ownership interest.⁴⁸ However, they may hold common stock in small business investment companies or certain investments targeted to low-income persons or communities.⁴⁹

FHLBs have some key off-balance sheet commitments. First, they may issue *standby letters of credit* (SLOCs) on behalf of their members. ASLOC is a guarantee by an FHLB, which is issued for a fee, to honor a payment in the event that an FHLB member is unable to fulfill its obligations. Prior to issuing a SLOC, an FHLB may perform standard underwriting and impose collateral requirements as if it were securing an advance.⁵⁰ Second, FHLBs are jointly and severally liable for all consolidated obligations, discussed in the following section. In other

⁴⁴ See FHLB of Dallas, "Credit Products Summary Guide," at https://fhlb.com/resourcecenter/Documents/Product-Services/Advances/FHLB-Dallas_Credit_Products_Summary_Guide.pdf.

⁴⁵ See Gara Afonso, Alex Entz, and Eric LeSuer, "Who's Lending in the Federal Funds Market," Federal Reserve Bank of New York, *Liberty Street Economics*, December 2, 2013, at https://libertystreeteconomics.newyorkfed.org/2013/12/ whos-lending-in-the-fed-funds-market.html.

⁴⁶ Ginnie Mae is the federal agency that facilitates the creation of mortgage-backed securities (MBS) linked to residential and multifamily mortgages guaranteed by various federal agencies, such as the FHA, Department of Veterans Affairs, and Department of Agriculture.

⁴⁷ See FHFA, 2014 Report to Congress, June 15, 2015, at https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/ FHFA_2014_Report_to_Congress.pdf.

⁴⁸ For example, the FHLBs would not be allowed to invest in common stock or junior tranches of collateralized mortgage obligations and real estate mortgage investment conduits (REMICs).

⁴⁹ Small business investment companies (SBICs), which are licensed and regulated by the Small Business Administration (SBA), provide debt and equity financing to businesses that meet certain SBA size requirements. For more information, see CRS Report R41456, *SBA Small Business Investment Company Program*, by Robert Jay Dilger.

⁵⁰ For example, when a state or local municipality public deposits funds into a federally insured bank, standby letters of credit may be used to provide insurance that exceeds the \$250,000 limit guaranteed by the FDIC if the bank were to become insolvent. For more information, see Government Finance Officers Association, "Collateralizing Public Deposits," September 2019, at https://www.gfoa.org/collateralizing-public-deposits.

words, if a FHLB fails to satisfy a payment obligation, another FHLB may be called on to repay all or any part of it, as determined or approved by the FHFA.⁵¹

Each FHLB is independently managed with its own board of directors that oversees strategic business and risk management decisions to achieve mission objectives.⁵² For this reason, each FHLB manages its asset portfolio, which may reflect advances with varying features and varying percentages of permissible investments. Such variations in products and investments may be influenced by the variation in the needs of the FHLB district members.

FHLB System Liabilities

Liabilities are the borrowings by a lending institution to acquire the funds used to make loans. The FHLB system issues a range of debt securities via its jointly owned Office of Finance to collect the funds necessary to make member advances.⁵³ Specifically, the Office of Finance issues consolidated bonds and discount notes.⁵⁴ For the discount notes, the maturities range from 4 to 20 weeks, typically auctioned in sizes from \$500 million to over \$5 billion each.⁵⁵ For the bonds, the maturities range from less than 1 year to 30 years, with the majority of issues between 1 and 5 years.⁵⁶ Buyers of debt securities issued on behalf of the FHLBs include commercial banks, central banks, pension funds, private sector investors, government agencies, and individuals.⁵⁷

Each FHLB is responsible for repaying the principal and interest on the percentage of consolidated obligations issued on its behalf by the Office of Finance. Any FHLB failing to repay its share of system liabilities is prohibited from paying dividends to its regional members or redeeming or repurchasing shares of its stock. Moreover, the FHLBs are jointly and severally liable for repayment of the total amount of consolidated obligations. For this reason, the FHFA can require one or more other FHLBs to repay any outstanding obligation.⁵⁸

The FHLBs' consolidated obligations do not carry the full-faith-and-credit backing of the federal government, but debt securities trade at interest rates similar to comparable Treasury debt issuances due to the FHLB system's GSE status. Given the federal assistance provided to GSEs—such as the Farm Credit Banks, Fannie Mae, and Freddie Mac—to meet their debt obligations, investors in consolidated obligations are likely to believe that an FHLB would not be allowed to

⁵¹ See FHLB of Cincinnati, SEC Form 10-K: Federal Home Loan Bank of Cincinnati for the fiscal year ended December 31, 2019, at https://www.fhlbcin.com/media/2918/2019-10k.pdf (hereinafter SEC Form 10-K: FHLB of Cincinnati).

⁵² For more information about the FHLBs' boards of directors, see GAO, *Federal Home Loan Banks: Information on Governance, Board Diversity, and Community Lending*, GAO-15-435, May 2015, at https://www.gao.gov/assets/680/670146.pdf.

⁵³ See FHFA, "Board of Directors of the Federal Home Loan Bank System Office of Finance," 75 *Federal Register* 23152-23167, May 3, 2010, at https://www.govinfo.gov/content/pkg/FR-2010-05-03/pdf/2010-10075.pdf.

⁵⁴ See FHFA, *Office of Finance*, April 2013, at https://www.fhfa.gov/SupervisionRegulation/Documents/ Office_of_Finance_Module_Final_Version_1.0_508.pdf.

⁵⁵ See FHLBs Office of Finance, "About Discount Notes," at http://www.fhlb-of.com/ofweb_userWeb/pageBuilder/ about-discount-notes-41.

⁵⁶ See FHLBs Office of Finance, "About Bonds," at http://www.fhlb-of.com/ofweb_userWeb/pageBuilder/about-bonds-47.

⁵⁷ See FHLBs Office of Finance, "About Debt Securities," at http://www.fhlb-of.com/ofweb_userWeb/pageBuilder/ debt-securities-home-41.

⁵⁸ This authority has never been invoked. See SEC Form 10-K: FHLB of Cincinnati.

fail.⁵⁹ Hence, the FHLBs can borrow at rates near those of the U.S. Treasury. The text box below summarizes additional GSE privileges for the FHLB system.

Summary of Government-Sponsored Enterprise Privileges for the FHLB System

Congress has given the Federal Home Loan Bank (FHLB) system certain privileges and exemptions, which include the following:

- a \$4 billion line of credit with the U.S. Treasury for the FHLB system as a whole (12 U.S.C. §1431);
- eligibility of debt (consolidated obligations) for Federal Reserve open market purchases, unlimited investment by commercial banks and thrifts (12 U.S.C. §24 for banks, §1464 for thrifts, §1767 for credit unions), and collateralizing public deposits (12 U.S.C. §1434);
- superlien priority on collateral pledged by member institutions, over any and all other creditors (12 U.S.C. §1430);
- the use of Federal Reserve banks as fiscal agents (12 U.S.C. §1435);
- exemption of earnings from federal, state, and local income tax (12 U.S.C. §1433);
- exemption of interest paid to investors from state income tax (12 U.S.C. §1433); and
- status of debt issues as government securities for purposes of the securities laws (15 U.S.C. §77c).

In sum, the FHLBs' profits are generated by the differences between the income generated by their assets and costs of their funds, generally referred to as lending spreads. The FHLBs' assets consist primarily of the advances they provide to their member institutions and are funded by their consolidated obligations. The FHLBs' GSE status translates into an implied federal guarantee, which allows them to borrow at rates closer to Treasury rates and subsequently offer advances at below-market rates to their members. The risks associated with financial intermediation necessitate the FHLBs to follow prudential capital and liquidity requirements, as discussed below.

Regulatory Capital and Liquidity Requirements

A sudden disruption in an FHLB's cash flow can occur under a variety of circumstances. For example, commercial banks cannot lend more than 25% of the value of their equity to a single borrower, but FHLBs are not limited on the amount of advances they can provide to an individual member.⁶⁰ Thus, a member failing to repay a large amount of advances can significantly reduce an FHLB's cash inflow.⁶¹ Because FHLBs' assets (as well as the collateral used for many of their advances) consist of mortgages and mortgage-related products, their cash flows can turn negative if, for example, property values fall below the outstanding mortgage balances, thereby providing homeowners with financial incentives to default.⁶² In these scenarios, cash flow disruptions can

⁵⁹ GAO, Federal Home Loan Bank System, An Overview of Changes and Current Issues Affecting the System, GAO-05-489T, April 13, 2005, p.8.

⁶⁰ See Adam B. Ashcraft, Morten L. Bech, and W. Scott Frame, *The Federal Home Loan Bank System: The Lender of Next-to-Last Resort?*, Federal Reserve Bank of New York, Staff Report no. 357, November 2008, at https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr357.pdf (hereinafter Ashcraft, Bech, and Frame, *FHLB System: Lender of Next-to-Last Resort?*, 2008).

⁶¹ Prior to being owned by JP Morgan Chase, Washington Mutual had accounted for approximately one-third of lending by the FHLB of Seattle. See DeSilver, "Seattle's FHLB in Big Money Trouble Again," 2009; and FDIC, "JPMorgan Chase Acquires Banking Operations of Washington Mutual," press release, September 25, 2008, at https://www.fdic.gov/news/news/press/2008/pr08085.html.

⁶² The FHLB of Seattle experienced losses from nonperforming, private-label MBS. See FHFA Office of Inspector General, *Merger of the Federal Home Loan Banks of Des Moines and Seattle: FHFA's Role and Approach for Overseeing the Continuing FHLBank*, WPR-2016-002, March 16, 2016, at https://www.fhfaoig.gov/sites/default/files/

erode FHLBs' capital reserves and possibly impede the system's ability to issue more consolidated obligations. Furthermore, the demand for advances may suddenly spike—which happened in 2008 when depository institutions initially turned to the FHLBs for liquidity rather than the Federal Reserve's discount window—and increase the system's need for liquidity.⁶³

For these reasons, the FHLB system has capital requirements. Specifically, each member institution must place a minimum paid-in (rather than publicly traded) capital stock investment as a condition to become and remain a member of its district FHLB.⁶⁴ Consequently, members must be inspected and prudentially regulated under state or federal banking or similar state laws or, in the case of CDFIs, certified by the CDFI Fund.⁶⁵ Amember institution must be in sound financial condition to reduce exposing its regional FHLB to greater credit, legal, and operational risks when engaging in transactions.⁶⁶

The current FHLB system's capitalization framework, established in 1999 by the GLBA, authorizes the FLHBs to issue Class A and Class B stock and defines permanent and total capital requirements.⁶⁷

- *Class A stock* is defined in statute as stock that can be redeemed six months after filing of a notice by a member.
- *Class B stock* is defined in statute as stock that can be redeemed five years after filing of a notice by a member.
- *Permanent capital* consists of amounts paid by members for Class B stock plus a FHLB's retained earnings.
- *Total capital* is equal to Class A stock plus permanent capital (i.e., Class B stock plus retained earnings), which must equal at least 4% of an FHLB's total assets.
- Each FHLB must also comply with a *leverage ratio requirement*—defined as a ratio of total capital to total assets—of 5%. To meet this requirement, total capital must be computed differently. An FHLB begins by multiplying its permanent capital by 1.5; other components of capital (e.g., Class Astock) are subsequently added to the result of this computation to obtain the definition of total capital used to determine the leverage ratio.
- Each bank also must meet a *risk-based capital requirement* by maintaining permanent capital in an amount at least equal to the sum of its credit risk, market risk, and operational risk charges. For the credit risk charge, an FHLB must multiply each of its assets—on-balance sheet assets, off-balance sheet risk

WPR-2016-002.pdf.

⁶³ See Ashcraft, Bech, and Frame, *FHLB System: Lender of Next-to-Last Resort?*, 2008. The recession that began in December 2007 and ended in 2009 is frequently referred to as the Great Recession. See NBER, "U.S. Business Cycle Expansions and Contractions," at http://www.nber.org/cycles.html; and Federal Reserve Bank of St. Louis "The Financial Crisis Timeline," at https://www.stlouisfed.org/Financial-Crisis.

⁶⁴ In December 2006, limitations were placed on an FHLB's ability to increase paid-in capital requirements on its members. See FHFA, "Limitation on Issuance of Excess Stock," 71 *Federal Register* 78046-78051, December 28, 2006, at https://www.govinfo.gov/content/pkg/FR-2006-12-28/pdf/E6-22325.pdf.

⁶⁵ See CRS Report R42770, Community Development Financial Institutions (CDFI) Fund: Programs and Policy Issues, by Sean Lowry.

⁶⁶ See FHFA, *Federal Home Loan Bank Membership*, March 2013, at https://www.fhfa.gov/SupervisionRegulation/ Documents/Federal_Home_Loan_Bank_Membership_Module_Final_Version_1.0_508.pdf.

⁶⁷ See FHFA, "Federal Home Loan Bank Capital Requirements," 82 *Federal Register* 30776-30798, July 3, 2017, at https://www.govinfo.gov/content/pkg/FR-2017-07-03/pdf/2017-13560.pdf.

exposures, and derivatives contracts—by an applicable risk weight, which is then summed to obtain the capital charge.⁶⁸ The market risk charge is calculated as the maximum loss in an FHLB's portfolio under various macroeconomic conditions. The operational risk capital charge is computed by adding the credit and market risk charges, then multiplying the sum by 30%.

The Office of Finance's issuance of consolidated obligations can be curtailed when either the leverage or risk-based capital requirements are not met; thus, satisfying the total demand for advances is possible only if total FHLB system capital levels keeps pace.⁶⁹

The FHLB system's prudential regulator, the FHFA, is required to conduct annual on-site examinations of the FHLBs and the Office of Finance.⁷⁰ The FHFA ensures that the FHLBs follow procedures necessary to mitigate exposure to financial risks. The FHFA can also issue supervisory letters, supervisory and capital directives, and can restrict payment of dividends to members. The FHLBs are also stress tested by FHFA, meaning that it develops and approves various macroeconomic scenarios used to assess the resiliency of the system's portfolios to extreme credit and market risk exposures.⁷¹

In addition to capital requirements, the FHLBs have liquidity requirements. The FHLBs' assets tend to have longer maturities (i.e., dates when the loans are expected to be repaid in full) relative to the maturities of their shorter-term liabilities, which is typically true for most financial intermediaries. Even if an FHLB's assets are performing, circumstances may arise when the timing of the expected cash inflows does not perfectly match the timing of expected cash outflows, resulting in an evaporation of liquidity. For the FHLBs, a sudden loss of liquidity might trigger intervention by Treasury or the Federal Reserve to purchase consolidated liabilities.

On August 2018, the FHFA required the FHLBs to increase their liquidity positions, which would enhance their abilities to continue operations over longer time periods without accessing capital markets or intervention by the federal government.⁷² The FHFA established standardized calculations that each FHLB must use to determine acceptable liquidity positions. Specifically, the funding gap calculation expresses the *difference* between an FHLB's assets and liabilities that are scheduled to mature during specified periods (e.g., three month, one year) as a percentage of its total assets. The FHLBs' funding gaps are subsequently monitored to stay within the set ranges

⁶⁸ The applicable risk weight for a particular asset or item is referred to as a credit risk percentage requirement (CRPR). The FHFA revised the process used to determine the appropriate CRPRs for corresponding assets. For more information, see FHFA, "Federal Home Loan Bank Capital Requirements," 84 *Federal Register* 5308-5333, February 20, 2019, at https://www.govinfo.gov/content/pkg/FR-2019-02-20/pdf/2018-27918.pdf.

⁶⁹ See FHFA, *Office of Finance*, April 2013, at https://www.fhfa.gov/SupervisionRegulation/Documents/ Office_of_Finance_Module_Final_Version_1.0_508.pdf; and James Thomson and Matthew Koepke, *Federal Home Loan Banks: The Housing GSE that Didn't Bark in the Night?*, Federal Reserve Bank of Cleveland, September 23, 2010, at https://www.clevelandfed.org/en/newsroom-and-events/publications/economic-trends/economic-trends-archives/2010-economic-trends/et-20100923-federal-home-loan-banks-the-housing-gse-that-didnt-bark-in-the-night.aspx.

⁷⁰ Federal Housing Enterprises Financial Safety and Soundness Act of 1992, (P.L. 102-550, Title XIII, as amended by the Housing and Economic Recovery Act of 2008 [P.L. 110-289]).

⁷¹ See FHFA, "Federal Home Loan Bank Stress Tests for Market and Credit Risk," at https://www.fhfa.gov/DataTools/ Downloads/Pages/Federal-Home-Loan-Bank-Stress-Tests-for-Market-and-Credit-Risk.aspx.

⁷² See FHFA, *Federal Home Loan Bank Liquidity Guidance*, AB 2018-07, August 23, 2018, at https://www.fhfa.gov/ SupervisionRegulation/AdvisoryBulletins/AdvisoryBulletinDocuments/AB-2018-07-FHLB-Liquidity-Guidance.pdf (hereinafter FHFA, *FHLB Liquidity Guidance*, 2018).

over the set time horizons, thus ensuring sufficient cash flow in case of events that may threaten liquidity.⁷³

Mission Goals

The FHLBs are required to administer the following community development programs:⁷⁴

- Affordable Housing Program (AHP). Each FHLB district has an AHP, established to provide grants to membership institutions on a competitive basis. Each FHLB sets aside 10% of its annual net earnings to fund its AHP. The funds are used to support the acquisition, construction, or rehabilitation of affordable rental housing in its district.⁷⁵ The AHPs may also support owner-occupied (single family) housing projects, particularly those for veterans, people with disabilities, and young adults transitioning out of foster care.⁷⁶
- **Community Investment Program (CIP).** The CIP allows member institutions to receive discounted advances to facilitate the purchase, construction, or rehabilitation of residential and housing developments in areas that meet certain eligibility requirements, such as having an area median income at or below a threshold to benefit low-income residents.⁷⁷
- Community Investment Cash Advance (CICA). The CICA allows member institutions to receive discounted advances to facilitate broader community and economic development, which might include commercial, industrial, and manufacturing projects, as well as social services and public facilities.⁷⁸ The collateral for these loans may include small business loans, small farm loans, small agribusiness loans, and community development loans fully secured by

 $^{^{73}}$ The FHFA funding gap calculation results in a negative number. Consequently, the funding gap requirements for the FHLBs established by the FHFA fall within the range of -10% to -20% for the three-month horizon and -25% to -35% for the one-year horizon. For more information on the formulas and requirements, see FHFA, *FHLB Liquidity Guidance*, 2018.

⁷⁴ See FHFA, Low-Income Housing and Community Development Activities of the Federal Home Loan Bank System, 2011, at https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/2011_Low-

IncomeHousingandCommDevoftheFHLBS_508.pdf; and Office of Finance, "Affordable Housing Programs," at http://www.fhlb-of.com/ofweb_userWeb/pageBuilder/affordable-housing-programs-33.

⁷⁵ For an example of an FHLB Affordable Housing Program (AHP) and how a member institution would apply for a grant, see FHLB of Indianapolis, "Affordable Housing Program," at https://www.fhlbi.com/products-services/ community-investment-and-housing/affordable-housing-program/; and FHLB of Indianapolis, "Applying for Affordable Housing Program (AHP) Grants," at https://www.fhlbi.com/products-services/community-investment-and-housing/affordable-housing-for-ahp. The FHLBs report their AHP activities on their websites, all of which are available at http://www.fhlb.gov.

⁷⁶ See FHFA, "Affordable Housing Program Amendments," 83 *Federal Register* 61186-61247, November 28, 2018; and FHLB of Dallas, "Subject: Expanded Criteria for Housing Assistance for Veterans Program (HAVEN)," Bulletin no. 2019-03, March 1, 2019, at https://www.fhlb.com/membership/Pages/Expanded-Criteria-for-Housing-Assistance-for-Veterans-Program-(HAVEN).aspx.

⁷⁷ For an example of the criteria that would qualify for a discounted advance, see FHLB of Indianapolis, "Community Investment Program", at https://www.fhlbi.com/products-services/community-investment-and-housing/community-and-economic-development/community-investment-program.

⁷⁸ See FHLB of Cincinnati, "Community Investment Cash Advances," at https://www.fhlbcin.com/housing-programs/ community-investment-cash-advances/.

collateral other than real estate, as well as securities representing a whole interest in such loans.⁷⁹

The FHFA also establishes housing mission goals for the FHLB system.⁸⁰ On June 3, 2020, the FHFA finalized housing goals pertaining to the system's Acquired Member Assets (AMA) program.⁸¹ In the AMA program, an FHLB is able to purchase mortgage originations from its members and either hold or sell them in the secondary market. The final rule establishes a target level of 20% of an FHLB's total AMA purchases to consist of mortgages originated for LMI households.⁸² The final rule also establishes a small member participation goal of 50% of AMA program participants. This rule is designed to encourage small institutions, which typically lack the necessary volume and scale to make effective use of secondary mortgage markets, to participate in the AMA program, particularly those primarily serving LMI families in LMI areas. The final rule allows the FHLBs flexibility to request alternative target levels for either or both goals from the FHFA if changing financial conditions would likely reduce the feasibility of meeting existing targets.⁸³

Policy Issues

Because the FHLBs were initially established to facilitate mortgage market liquidity, policy discussions tend to focus on the system's overall effectiveness in fulfilling its original mission, particularly as its structure has continued to evolve. Specifically, Congress expanded FHLB membership eligibility to include commercial banks and removed the minimum mortgage asset requirement of 10% (see "Instability in the Commercial Banking Sector").⁸⁴ Consequently, FHLB members no longer need to be principally engaged in mortgage financing. Some financial firms

⁸¹ See FHFA, "Federal Home Loan Bank Housing Goals Amendments Final Rule," June 25, 2020, at https://www.fhfa.gov/SupervisionRegulation/Rules/Pages/Federal-Home-Loan-Bank-Housing-Goals-Amendments-Final-Rule.aspx. The Mortgage Purchase Program and the Mortgage Partnership Finance Program are two types of Acquired Member Assets (AMA) programs. For more information, see FHFA, "Fact Sheet: Final Rule on Federal Home Loan Bank Housing Goals," at https://www.fhfa.gov/Media/PublicAffairs/PublicAffairsDocuments/FHLBank-Housing-Goals-Fact-Sheet-Final-rule.pdf.

⁸² The final rule combines the existing regulation's four separate retrospective mortgage goals into a single prospective mortgage purchase housing goal. The four goals are for home purchase mortgages for low-income families; home purchase mortgages for low-income areas; home purchase mortgages for very low-income families; and refinancing mortgages for low-income families.

⁸³ The final rule also applies the housing goals to each FHLB that acquires any AMA mortgages during a year, thus eliminating a previously existing \$2.5 billion volume threshold that previously triggered the application of housing goals for each FHLB.

⁸⁴ 12 C.F.R. Part 1263 of FHFA regulations establishes eligibility requirements, a membership application process, and capital stock requirements for FHLB membership, as well as procedures for the termination of FHLB membership (including the liquidation of member indebtedness, settlement of outstanding business transactions, and redemption or repurchase of capital stock), in the event of voluntary withdrawal from membership, involuntary termination of membership, or a merger or consolidation involving member and nonmember institutions. 12 C.F.R. Part 1263 also contains provisions governing the readmission of FHLB members, FHLB access to member information, and the display of official FHLB membership insignia.

⁷⁹ See FHFA, Report on Collateral Pledged to Federal Home Loan Banks: Prepared for the Senate Committee on Banking Housing and Urban Affairs and the House Committee on Financial Services, August 5, 2016, at https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/2016_FHLBank-Collateral-Report.pdf. Some FHLBs have specialized names for their advance programs that would support disaster relief and small business assistance. See FHLB of Dallas, "Grants and Advances that Fund Hope," at https://www.fhlb.com/community/Pages/Community-Investment.aspx.

⁸⁰ The director of the FHFA is required to "establish housing goals with respect to the purchase of mortgages, if any, by the [FHLBs]." (12 U.S.C. §1430c(a)).

that primarily hold mortgages and mortgage-related assets, however, are not eligible to be FHLB members. This section discusses the FHLB system's effectiveness in fulfilling its mission in light of current operations and limitations. This section also discusses why certain assets, which may align with mission goals, may not be considered eligible collateral for FHLB advances.

Mortgage Funding or General Wholesale Funding

Lenders generally rely on *rollovers*, a continuous sequence of short-term cash borrowings, to fund loan portfolios. Depositories rely particularly on deposits, which can be seen as sequences of short-term cash borrowings from depositors and repaid with interest. Instead of relying primarily on deposits, supplementary short-term funds may be obtained from wholesale funding markets (sometimes referred to as the interbank market). When depositories borrow and lend short-term cash to each other, the cash instruments can be in various forms, including federal funds and brokered deposits.⁸⁵

Another commonly used wholesale funding instrument is the repurchase agreement, or repo. A *repo* is a contract in which one party sells one or more securities with a commitment to repurchase the securities on a future date at a higher price, which is equivalent to a collateralized loan.⁸⁶ The securities are used as collateral for the cash advance. The repo rate, the interest paid on the loan, is calculated as the difference between the initial price of the securities and their repurchase price. Repos are an example of a money market transaction that allows a financial institution to utilize some of its illiquid loan assets to obtain cash for other business needs (e.g., to satisfy its depositors' demands for cash or to temporarily fund assets scheduled to be sold to other financial institutions).

Cash advances from federally-related facilities are *fungible* or *functionally equivalent* substitutes for repo instruments.⁸⁷ In other words, either advances or repos can be used to borrow liquid funds. The FHLBs' GSE status allows the system to borrow money at rates near those of comparable Treasury rates and then provide cheaper advances relative to private market repos. Advances from the FHLBs may have some additional advantages over repos. For example, the FHLBs may not require additional collateral (i.e., margin calls) from their members when financial market conditions change. Members may be allowed to prepay advances and obtain advances with option-like features without having to purchase additional derivative contracts. The text box at the end of this section lists some of the other federal or federally backed institutions that provide wholesale funding to financial institutions.

The following developments illustrate the functional equivalency of FHLB advances to the Federal Reserve's discount window and to private sector repo transactions.

• During the 2007-2009 recession, lending through the FHLB system increased. According to the New York Federal Reserve Bank, FHLB advances experienced

⁸⁵ See Federal Reserve Bank of New York, "Repurchase and Reverse Repurchase Agreements," at https://www.newyorkfed.org/aboutthefed/fedpoint/fed04.html.

⁸⁶ For more information on repos, see CRS In Focus IF11383, *Repurchase Agreements (Repos): A Primer*, by Marc Labonte.

⁸⁷ By contrast, reverse repo transactions are functionally equivalent to securities lending transactions. In this case, a lender is providing a safer asset (or cash) in exchange for holding a risker asset and faces counterparty risk if the borrower does not repurchase the riskier asset at a higher price. See Nathan Foley-Fisher, Borghan Narajabad, and Stephane Verani, "Lending to Invest," unpublished manuscript, March 2018, at https://www.rse.anu.edu.au/media/2422454/Verani-Paper-2018.pdf.

a 25% increase from the end of 2005 to the second half of 2007.⁸⁸ More than half of the growth in advances can be attributed to 10 FHLB members.⁸⁹ In addition, the FHLB system saw an increase in the demand for its consolidated obligations during the 2007-2009 financial crisis, reflecting a "flight to quality" event in which risky assets were converted to safe assets (i.e., securities backed by the U.S. federal government) or liquidated to cash.⁹⁰ Because FHLB advances are functionally equivalent to borrowing from the Federal Reserve's discount window—but less expensive—FHLB members arguably pay no penalty in the form of higher fees for possible mismanagement of their liquidity positions.⁹¹

• On September 3, 2014, the Office of the Comptroller of the Currency (OCC), the Federal Reserve, and the FDIC issued a final rule implementing the liquidity coverage ratio (LCR) standard, which was established by the Basel Committee on Banking Supervision.⁹² Large, internationally-active banking organizations are required to hold high-quality liquid assets (HQLA), consisting of cash and qualified government and corporate debt securities (defined by banking regulators), which can be converted easily and quickly into cash in an amount equal to or greater than their projected net cash outflows over a 30-day period.⁹³ Specifically, a bank's LCR is defined as a ratio—the numerator consists of its stock of HQLA, and the denominator consists of its net cash outflows over a 30-day time period. After the final rule, large banks increased their usage of FHLB advances to purchase HQLA, which includes FHLB consolidated obligations, to comply with their LCR requirements.⁹⁴

⁸⁸ See Ashcraft, Bech, and Frame, The FHLB System: The Lender of Next-to-Last Resort?, 2008.

⁸⁹ Washington Mutual, Bank of America, and Countrywide were the largest FHLB borrowers over this period. Anecdotally, these institutions had planned to sell loans to be securitized; however, the disruption of the secondary mortgage markets prevented the sales, prompting a rise in the demand for FHLB advances to fund the loans that stayed in their asset portfolios. See Ashcraft, Bech, and Frame, *The FHLB System: The Lender of Next-to-Last Resort*?, 2008. For more about the disruption in the credit markets in 2007, see David Greenlaw et al., "Leveraged Losses: Lessons from the Mortgage Market Meltdown," paper prepared for the U.S. Monetary Policy Forum, New York, NY, February 2008, at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.160.4646&rep=rep1&type=pdf.

⁹⁰ See OCC, Federal Reserve System, and FDIC, "Liquidity Coverage Ratio: Liquidity Risk Measurement Standards; Final Rule," 79 *Federal Register* 61440-61541, October 10, 2014, at https://www.occ.treas.gov/news-issuances/federal-register/2014/79fr61440.pdf.

⁹¹ See Stephen G. Cecchetti and Piti Disyatat, "Central Bank Tools and Liquidity Shortages," Federal Reserve Bank of New York, *Economic Policy Review*, vol. 16, no. 1 (August 2010), pp. 29-42, at https://www.newyorkfed.org/ medialibrary/media/research/epr/10v16n1/1008cecc.pdf; and Stojanovic, Vaughan, and Yeager, "Do FHLB Membership and Advances Increase Bank Risk-Taking?," 2008, pp. 680-698.

⁹² See OCC, Federal Reserve System, and FDIC, "Liquidity Coverage Ratio: Liquidity Risk Measurement Standards; Final Rule," 79 *Federal Register* 61440-61541, October 10, 2014.

⁹³ Except for certain circumstances, banks covered by this rule are defined as large, internationally-active banking organizations with \$250 billion or more in total consolidated assets or \$10 billion or more in total on-balance sheet foreign exposure, as well as consolidated subsidiary depository institutions of these banking organizations with \$10 billion or more in total consolidated assets.

⁹⁴ The share of commercial banks with assets over \$50 billion accounted for approximately 50% of FHLB advances by the end of 2016, which is significantly higher than their share of 2% in 2000. See Stefan Gissler and Borghan Narajabad, "The Increased Role of the Federal Home Loan Bank System in Funding Markets, Part 2: Recent Trends and Potential Drivers," Board of Governors of the Federal Reserve System, FEDS Notes, October 18, 2017, at https://www.federalreserve.gov/econres/notes/feds-notes/the-increased-role-of-the-federal-home-loan-bank-system-infunding-markets-part-2-20171018.htm (hereinafter Gissler and Narajabad, "The Increased Role of the FHLB System in Funding Markets," 2017).

• In 2016, the Securities and Exchange Commission removed an exemption that allowed institutional money market funds (MMFs) to maintain a stable net asset value (NAV); instead, MMFs were to sell and redeem shares based on the current market value of the securities in their underlying portfolios, thus conducting transactions at a floating NAV.⁹⁵ In response, MMFs shifted \$1.2 trillion from prime funds with floating NAVs (e.g., those consisting of commercial paper) to government funds, which are largely restricted to holding Treasury and agency securities—including FHLBs' consolidated obligations—to appeal to fixed rate investors preference of funds with more stable NAVs.⁹⁶ In sum, given the LCR and NAV regulations, the FHLBs—while intermediating between large banks and MMFs—arguably have become a functionally equivalent alternative to private sector repo instruments for both parties as they comply with the recent regulations.⁹⁷

In sum, whether the FHLB system specifically facilitates mortgage funding or simply provides wholesale funding at below-market rates is debatable because the funding of assets is a fungible activity.⁹⁸ Lenders arguably focus on collectively funding their entire asset portfolios rather than funding each asset individually. Although the FHLB advances may reduce the costs to fund a particular category of loans held in asset portfolios, the overall effect may translate into a subsidy that reduces a portion of the total wholesale funding costs, which otherwise would be borne by a member institution.

On the one hand, the fungible nature of the FHLBs' wholesale lending may contribute to increasing financial risks for taxpayers. For example, by providing loans to WaMu, the FHLB of Seattle's exposure to concentration risk (i.e., exposure to a single or predominant source of risk) increased, which arguably may be associated with lending to large bank holding companies.⁹⁹

⁹⁵ For periods of heavy redemption requests, the Securities and Exchange Commission also provided Money Market Fund (MMF) boards of directors with tools to suspend such requests (i.e., impose gates) and levy redemption fees. See SEC, "Money Market Fund Reform; Amendments to Form PF; Final Rule," 79 *Federal Register* 47736-47983, August 14, 2014, at https://www.govinfo.gov/content/pkg/FR-2014-08-14/pdf/2014-17747.pdf.

⁹⁶ See Gissler and Narajabad, "The Increased Role of the FHLB System in Funding Markets," 2017; Kenechukwu Anadu and Viktoria Baklanova, *The Intersection of U.S. Money Market Mutual Fund Reforms, Bank Liquidity Requirements, and the Federal Home Loan Bank System*, Federal Reserve Bank of Boston, Working Paper RPA 17-05, October 31, 2017 (hereinafter Anadu and Baklanova, *The Intersection of U.S. MMF Reforms, Bank Liquidity Requirements, and the FHLB System*, 2017); and Sabastian Ramos, *ICD Commentary: Operational and Accounting Issues with the Floating NAV and the Impact on Money Market Funds*, SEC, Institutional Cash Distributors, LLC, July 2013, at https://www.sec.gov/comments/s7-03-13/s70313-40.pdf. For more information on MMF holdings, see "Money Market Funds: Investment Holdings Detail," at https://www.federalreserve.gov/releases/efa/efa-project-money-marketfunds-investment-holdings-detail.htm.

⁹⁷ See Gissler and Narajabad, "The Increased Role of the FHLB System in Funding Markets," 2017; Anadu and Baklanova, *The Intersection of U.S. MMF Reforms, Bank Liquidity Requirements, and the FHLB System*, 2017; and David Andolfatto and Jane Ihrig, "Why the Fed Should Create a Standing Repo Facility," Federal Reserve Bank of St. Louis, *On the Economy*, March 6, 2019, at https://www.stlouisfed.org/on-the-economy/2019/march/why-fed-create-standing-repo-facility.

⁹⁸ See W. Scott Frame, Diana Hancock, and Wayne Passmore, "Federal Home Loan Bank Advances and Commercial Bank Portfolio Composition," *Journal of Money, Credit and Banking*, vol. 44, no. 4 (June 2012), pp. 681-684.

⁹⁹ According to the FHFA Office of Inspector General, the top four large bank holding companies—Bank of America, Citigroup, J.P. Morgan Chase, and Wells Fargo—accounted for one quarter of aggregate advances at the end of 2013. See FHFA Office of Inspector General, *Recent Trends in Federal Home Loan Bank Advances to JPMorgan Chase and Other Large Banks*, Evaluation Report EVL-2014-006, April 16, 2014, at https://www.fhfaoig.gov/Content/Files/EVL-2014-006_1.pdf; and FHFA, *2014 Report to Congress*, Figure 4, June 15, 2015, at https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/FHFA_2014_Report_to_Congress.pdf.

Concentration risk may amplify other financial risks. A sudden change in interest rates affecting the cash flows of one or more of the large bank members, for example, could threaten the timely repayment of outstanding FHLB advances and overall solvency of a district FHLB if the balances owed are relatively large.

On the other hand, providing advances to the largest banks generates significant revenues for the FHLBs, which does support the system's affordable housing mission.¹⁰⁰ Moreover, the revenues generated by the large members are arguably more stable relative to those generated by smaller members, which have substantially lower volumes of lending activity. Furthermore, WaMu's portfolio consisted predominately of mortgage assets and, therefore, was less diversified. By contrast, large commercial banks engage in more diversified lending portfolios and financial activities, arguably reducing the amount of concentration risk transferable to the FHLB system. The largest U.S. banking firms are also now required to hold larger amounts of HQLA and capital buffers to increase their resiliency to adverse financial and macroeconomic events.¹⁰¹ Hence, the FHLBs' concentration risk exposure may be dampened in light of greater prudential requirements for larger member institutions.

¹⁰⁰ In addition, the increased demand for the FHLBs' consolidated obligations subsequently lowers the system's cost of funds. See Jonathan Adams-Kane and Jakob Wilhelmus, *The Real Story Behind the Surge in Federal Home Loan Bank Advances: Macroeconomic Policy Changed How Banks Borrow*, Milken Institute, September 2017, at https://milkeninstitute.org/sites/default/files/reports-pdf/092117-WP-MMFs-and-FHLB-1.pdf.

¹⁰¹ See CRS Report R44573, Overview of the Prudential Regulatory Framework for U.S. Banks: Basel III and the Dodd-Frank Act, by Darryl E. Getter.

Federal Wholesale Funding Institutions

Examples of federal wholesale funding facilities established for certain lending institutions are below.

- The Federal Reserve System was established by the Federal Reserve Act of 1913 (P.L. 63-43, 38 Stat 251) with a discount window initially to provide liquidity for its commercial bank members.¹⁰² Today, all depository institutions may establish borrowing privileges at the discount window.¹⁰³ The Federal Reserve banks provide depository institutions with three types of discount window lending programs, each with its own interest rate ("discount rate"): (1) primary credit (a short-term source of credit available to generally sound depository institutions on a very short-term basis as a backup rather than a regular source of funding); (2) secondary credit (typically overnight at a higher rate than primary credit, haircuts are typically applied to the collateral); and (3) seasonal credit (primarily for small depository institutions with demonstrated liquidity pressures of a seasonal nature, not normally available to institutions with deposits of \$500 million or more).¹⁰⁴ Each Federal Reserve Bank's board of directors sets the discount rates, subject to the review and determination of the Board of Governors of the Federal Reserve System. All discount window loans must be collateralized to the satisfaction of the lending Federal Reserve bank. The Federal Reserve's discount window was designed for use as an emergency backup, as opposed to regular source funding,¹⁰⁵ hence, lending at a penalty rate that is likely to be more expensive than the other federal wholesale funding facilities.
- The Federal Home Loan Bank (FHLB) system, as discussed in this report, provides cash advances for its members. Depositories arguably view the FHLB advances as a preferred alternative to borrowing from the Federal Reserve's discount window. FHLB advances can be used for regular source funding, are relatively less expensive, and carry less stigma regarding the liquidity needs of the borrowing institution.¹⁰⁶ The FHLBs themselves do not have access to the Federal Reserve's discount window, but the Federal Reserve may purchase the FHLBs' consolidated liabilities.
- The central liquidity facility (CLF), which exists within and is managed by the National Credit Union Association, is the wholesale liquidity lender to the credit union system.¹⁰⁷ Following the significant decline in credit union liquidity between 1971 and 1978 due to Regulation Q, the CLF was created in 1979.¹⁰⁸ The CLF, similar to the FHLB system, is owned by its member credit unions. The CLF may lend up to the statutory limit of 12 times its subscribed capital stock and surplus. Due to Coronavirus Disease 2019 (COVID-19), the CLF lending limit has been temporarily increased, through December 31, 2020, to 16 times its subscribed capital stock.¹⁰⁹ Credit unions may still borrow from the FHLBs and the Federal Reserve's discount window.¹¹⁰
- The Farm Credit System (FCS) is a nationwide financial cooperative that is a government-sponsored enterprise.¹¹¹ The FCS has four district wholesale banks: AgFirst, AgriBank, CoBank, and the Farm Credit Bank of Texas.¹¹² The FCS's Federal Farm Credit Banks Funding Corporation, which is analogous to the FHLBs' Office of Finance, issues debt securities on behalf of the FCS institutions.¹¹³
- Due to the COVID-19 pandemic, the Federal Housing Finance Agency authorized two government sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, to provide *dollar roll transactions* to allow investors to sell their mortgage-backed securities (MBS) to either GSE in exchange for cash with an agreement to repurchase a similar MBS at some future date, which is analogous to a repo transaction.¹¹⁴

Nonbanks and Captive Insurance Companies

Not all financial institutions that participate in the mortgage industry are eligible to become members of a district FHLB, including those listed below.

¹⁰² See Thomas M. Humphrey, "The Real Bills Doctrine," Federal Reserve Bank of Richmond, *Economic Review*, September/October 1982, at https://www.richmondfed.org/-/media/richmondfedorg/publications/research/ economic_review/1982/pdf/er680501.pdf; and Clay J. Anderson, *Evolution of the Role and the Functioning of the Discount Mechanism*, Federal Reserve Bank of Philadelphia, Fundamental Reappraisal of the Discount Mechanism, November 1966, at https://fraser.stlouisfed.org/files/docs/historical/federal%20reserve%20history/discountmech/ evolrole_ander.pdf.

¹⁰³ See Pam Hendry, "The Federal Reserve's Discount Window: What It Is and How It Works," Federal Reserve System, *Community Banking Connections*, Second Issue 2016, at https://www.communitybankingconnections.org/articles/2016/i2/federal-reserve-discount-window.

• Nondepository Firms. In addition to depositories, nondepository firms engage in originating and servicing mortgages. Nondepository firms originate single-family residential mortgages for a fee on behalf of an ultimate lender, which owns the loan and rights to the repayment of principal and interest. These originators may also service mortgages (i.e., perform various administrative tasks for a fee).¹¹⁵ The right to earn income for servicing a mortgage, the mortgage servicing right (MSR), is an asset for a mortgage servicer. Following revisions to their capital requirements in 2013, some banks reduced the amount of MSRs they were willing to hold.¹¹⁶ According to the Federal Reserve, nonbanks purchased more than \$500 million MSRs from banks in bulk sales.¹¹⁷ As of April 2020, nonbank mortgage servicers hold MSRs for approximately 50% of the federally insured mortgage market, which includes Fannie Mae, Freddie Mac, and Ginnie

¹⁰⁴ The general policies that govern discount window lending may be found in the Federal Reserve's Regulation A. See Federal Reserve, "Discount Window Lending," at https://www.federalreserve.gov/regreform/discount-window.htm; Federal Reserve Bank of New York, "Discount Window," at https://www.newyorkfed.org/banking/discountwindow; and Federal Reserve Banks, "Lending," *Operating Circular*, no. 10 (July 2013), at https://www.frbservices.org/assets/ resources/rules-regulations/071613-operating-circular-10.pdf.

¹⁰⁵ See Stojanovic, Vaughan, and Yeager, "Do FHLB Membership and Advances Increase Bank Risk-Taking?," 2008, pp. 680-698.

¹⁰⁶ See Mark Carlson and Jonathan D. Rose, "Stigma and the Discount Window," Board of Governors of the Federal Reserve System, FEDS Notes, December 19, 2017, at https://www.federalreserve.gov/econres/notes/feds-notes/stigma-and-the-discount-window-20171219.htm.

¹⁰⁷ National Credit Union Association (NCUA), "Central Liquidity Facility," at https://www.ncua.gov/support-services/ central-liquidity-facility.

¹⁰⁸ Harold Black and Robert H. Dugger, "Credit Union Structure, Growth and Regulatory Problems," *Journal of Finance*, vol. 36, no. 2 (May 1981), pp. 529-538. Regulation Q interest rate ceilings, which stemmed from the Banking Act of 1933 (48 Stat. 162) and the Banking Act of 1935 (49 Stat. 684), imposed interest rate ceilings on time and savings deposits.

¹⁰⁹ See NCUA, "Enhancements to Central Liquidity Facility Membership and Borrowing Authority," press release, April 20, 2020, at https://www.ncua.gov/regulation-supervision/letters-credit-unions-other-guidance/enhancements-central-liquidity-facility-membership-and-borrowing-authority.

¹¹⁰ See NCUA, "Your Credit Union's Contingent Liquidity and the Central Liquidity Facility Frequently Asked Questions," August 2012, at https://www.ncua.gov/files/letters-credit-unions/LCU2012-10Encl.pdf.

¹¹¹ See CRS Report RS21278, *Farm Credit System*, by Jim Monke; and David Nickerson and Ronnie J. Phillips, "Financial Deja Vu?: The Farm Credit System's Past Woes Could Strike the Federal Home Loan Bank System," *Regulation*, vol. 25, no. 1 (Spring 2002), pp. 40-45.

¹¹² See Farm Credit System, "Our Structure: List of Farm Credit Organizations," at https://farmcredit.com/our-structure.

¹¹³ See Federal Farm Credit Banks Funding Corporation, "Funding the Farm Credit System," at https://www.farmcreditfunding.com/ffcb_live/index.html.

¹¹⁴ See FHFA, "FHFA Authorizes the Enterprises to Support Additional Liquidity in the Secondary Mortgage Market," press release, March 23, 2020, at https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Authorizes-the-Enterprises-to-Support-Additional-Liquidity-in-the-Secondary-Mortgage-Market.aspx.

¹¹⁵ A mortgage servicer collects and remits the principal and interest payments to the mortgage lender; manages the borrower's escrow account; processes the loan title once paid in full; and administers loss mitigation (e.g., forbearance plans) or foreclosure resolution on behalf of the lender if the borrower falls behind or fails to make full payment.

¹¹⁶ See CRS Report R44573, Overview of the Prudential Regulatory Framework for U.S. Banks: Basel III and the Dodd-Frank Act, by Darryl E. Getter.

¹¹⁷ See Board of Governors of the Federal Reserve System, FDIC, OCC, NCUA, *Report to Congress on the Effect of Capital Rules on Mortgage Servicing Assets*, June 2016, at https://www.federalreserve.gov/publications/other-reports/files/effect-capital-rules-mortgage-servicing-assets-201606.pdf.

Mae.¹¹⁸ Thus, the mortgage industry has seen a rise in participating nonbank firms.

• **Real Estate Investment Trusts (REITs).** AREIT is a real estate company that would otherwise be taxed as a corporation, except that it meets certain tests and faces numerous restrictions.¹¹⁹ For example, a REIT must have at least 75% of its assets and gross income in real estate and distribute at least 90% of profits to shareholders. Mortgage REITs invest in residential, multifamily, and commercial mortgage assets, as well as MBS.¹²⁰ Repos are the principal source of funding for mortgage REITs.¹²¹

Many of these nondepository firms are unable to join the FHLB system because they lack a primary prudential federal or state regulator or certification as a CDFI. If a member is not regularly examined for safety and soundness, then the increased default risk on advances may threaten the financial condition of the issuing FHLB and increase the financial hardship on other member institutions in the cooperative.

Prior to 2016, mortgage REITs were able to join the FHLB system and access advances to obtain funding by creating "captive insurance companies" (captives).¹²² In 2016, the FHFA rescinded the eligibility of captive insurers affiliated with mortgage REITs, forcing them to terminate their FHLB memberships by early 2021.¹²³ The FHFA noted that the prudential regulation of captive insurers was different from traditional commercial insurance companies that sell insurance to the public at large.¹²⁴ Moreover, the financial risks of FHLB lending to insurance companies are generally higher relative to depositories.¹²⁵ The superlien protects an FHLB's financial interest by

¹¹⁸ See Letter from John W. Ryan, president and CEO of the Conference of State Bank Supervisors, to The Honorable Maxine Waters, chairwoman of the House Financial Services Committee, The Honorable Mike Crapo, chairman of the Senate Banking Committee, The Honorable Patrick McHenry, ranking member of the House Financial Services Committee, and The Honorable Sherrod Brown, ranking member of the Senate Banking Committee, April 15, 2020, at https://www.csbs.org/sites/default/files/2020-04/CSBS%20Letter%20COVID19%20Apr%2020f.pdf.

¹¹⁹ For more information, see CRS Report R44421, *Real Estate Investment Trusts (REITs) and the Foreign Investment in Real Property Tax Act (FIRPTA): Overview and Recent Tax Revisions*, by Jane G. Gravelle.

¹²⁰ Equity Real Estate Investment Trusts (REITs) own and operate multifamily and commercial properties. Multifamily properties—structures designed to house five or more family units—include traditional apartment buildings, subsidized housing, and housing for seniors and students. Commercial properties include buildings used for offices, retail businesses, hotels and motels, industrial warehouses, and other business purposes. For more information, see CRS Report R46480, *Multifamily Housing Finance and Selected Policy Issues*, by Darryl E. Getter.

¹²¹ See Mortgage Bankers Association, *Restore Mortgage REIT Access to Federal Home Loan Bank Advances*, at https://www.mba.org/Documents/Policy/Issue%20Briefs/REITs_FHLBs.pdf.

¹²² A captive insurance company (captive) is a licensed insurance company created and wholly owned by a parent company to insure itself against various business risks that might be insured by a separate commercial insurance entity. In other words, captive insurance is a form of self-insurance, and captives are subject to state reporting, capital, and reserve requirements established for insurance companies. See National Association of Insurance Commissioners, "Captive Insurance Companies," February 27, 2020, at https://content.naic.org/cipr_topics/

topic_captive_insurance_companies.htm; and Captive Insurance News, "What is Captive Insurance," at https://www.captive.com/news/2018/08/08/what-is-captive-insurance.

¹²³ See FHFA, "Members of Federal Home Loan Banks," 18 *Federal Register* 12, January 20, 2016, at https://www.govinfo.gov/content/pkg/FR-2016-01-20/pdf/2016-00761.pdf.

¹²⁴ The FHFA states that it does not pass judgement on the adequacy of captive insurance regulation, particularly for individual captives that were organized for specific business purposes. See FHLB, "Final Rule: Federal Home Loan Bank Membership FAQs," at https://www.fhfa.gov/Media/PublicAffairs/PublicAffairsDocuments/FAQs-for-Final-Rule_01-12-16.pdf; and FHFA, "Members of Federal Home Loan Banks," 18 *Federal Register* 12, January 20, 2016.

¹²⁵ See FHFA, Report on Collateral Pledged to Federal Home Loan Banks: Prepared for the Senate Committee on Banking, Housing and Urban Affairs and the House Committee on Financial Services, August 5, 2016, at

placing its claims ahead of the FDIC or NCUA if a failed depository is placed into receivership. Insurance companies, however, are regulated by applicable state laws. State insurance regulators, for example, limit the collateral amounts that insurance companies can pledge to secure FHLB advances. Insolvent insurance companies, which are not federally insured, would also be required to go through a state receivership process. Whether the superlien authority would protect any FHLB's claims on assets used to secure advances is uncertain. Consequently, the FHLBs typically require physical delivery of the collateral pledged by eligible member insurance companies prior to providing them with advances. Hence, the particular risks associated with lending to insurance companies factored into the FHFA's 2016 decision to deny captives eligibility as FHLB members.

In September 2019, Treasury recommended, among other things, that the FHFA consider whether expanded access to the FHLB system would be warranted in certain circumstances.¹²⁶ For this reason, the FHFA is currently revisiting its membership eligibility requirements.¹²⁷

Collateral Eligibility Issues: Mortgage Servicing Rights, Guaranteed Portions of Small Business Administration Loans

As previously noted, MSRs are not accepted by the FHLBs as eligible collateral that can be pledged for advances. MSRs are valued as the discounted sum of projected future cash flows, which are calculated using the expected cash flows generated from the underlying mortgage asset. The risks to an MSR's cash flows are linked to the risks of the underlying mortgage asset.¹²⁸ If, for example, interest rates were to decline and cause an increase in mortgage prepayment risk, then the value of the linked MSRs would also decline in anticipation of future cash payments being terminated. During March and April 2020, following a drop in interest rates, MSR values fell 50%-60%.¹²⁹ Borrowers can also default on their mortgages, terminating the cash flows that would have been generated by the assets and linked MSRs. The costs to service a defaulted mortgage would also increase substantially.¹³⁰ For these reasons, the volatility of MSR values reflect the inherent volatility of their anticipated cash flows.

Given the high volatility of MSR values, the FHLBs would need to require larger haircuts if these MSR assets were used as eligible collateral to mitigate losses. In addition, the FHLBs would need to acquire servicing licenses or have contractual arrangements already in place in case they would need to take possession of MSRs following the default of a member institution.¹³¹ Given the challenges for the FHLBs if MSRs were used as collateral, nonbanks that lack portfolios of

https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/2016_FHLBank-Collateral-Report.pdf.

¹²⁶ See Treasury, *Housing Finance Reform Plan: Pursuant to the Presidential Memorandum Issued March* 27, 2019, HUD, at https://home.treasury.gov/system/files/136/HUD-Housing-Finance-Reform-Plan-September-2019.pdf.

¹²⁷ See FHFA, *Federal Home Loan Bank Membership: Request for Input*, February 2020, at https://www.fhfa.gov/ Media/PublicAffairs/PublicAffairsDocuments/RFI-on-FHLBank-Membership.pdf.

¹²⁸ See CRS Insight IN11377, Mortgage Servicing Rights and Selected Market Developments, by Darryl E. Getter.

¹²⁹ See Karan Kaul and Laurie Goodman, *Should Non-Bank Mortgage Companies Be Permitted to Become Federal Home Loan Bank Members?*, Urban Institute, Housing Finance Policy Center, June 2020, at https://www.urban.org/sites/default/files/publication/102400/should-nonbank-mortgage-companies-be-permitted-to-become-federal-home-loan-bank-members.pdf (hereinafter Kaul and Goodman, *Should Non-Bank Mortgage Companies Be Permitted to Become FHLB Members?*, 2020).

¹³⁰ See Laurie Goodman, "Servicing Costs and the Rise of the Squeaky Clean Loan," Urban Institute, *Mortgage Banking* (February 2016), at https://www.urban.org/sites/default/files/publication/77626/2000607-Servicing-Costs-and-the-Rise-of-the-Squeaky-Clean-Loan.pdf.

¹³¹ See Kaul and Goodman, Should Non-Bank Mortgage Companies Be Permitted to Become FHLB Members?, 2020.

eligible assets (e.g., mortgages) might be unable to obtain advances even if they were granted FHLB membership.

As previously noted, the GLBA gave FHLBs the ability to use small business loans as collateral to secure advances. Some FHLBs, however, are reluctant to accept as eligible collateral the portions of small business loans that are federally guaranteed by the Small Business Administration (SBA)—although portions that are not guaranteed by the SBA may still be eligible.¹³² If a member institution were to fail to repay an advance, an FHLB's superlien authority could not be used to perfect its security interests on the SBA-guaranteed portion of a loan.¹³³ Following a review of the relevant statutes, FHFA determined that SBA does not allow third parties (i.e., persons who are not SBA-approved lenders) to present and collect on SBA guarantees.¹³⁴ The FHLBs might still be willing to allow the use of SBA-guaranteed loans as collateral with a large haircut and under extenuating circumstances.

Conclusion

The FHLB system was established to address frequent liquidity shortfalls, or cash flow disruptions, experienced by mortgage lenders during the Great Depression. It has evolved over several decades into a system that provides wholesale funding at a discount to member institutions. While the FHLBs' activities generate funds to support various affordable housing needs in their districts, their activities are largely fungible with repo transactions and, therefore, arguably support overall liquidity needs rather than those specific to mortgage credit markets, which was the original congressional intent. For this reason, the potential risks of the FHLB system's activities to taxpayers has been particularly subject to debate. On the one hand, FHLB member institutions can bypass the Federal Reserve's discount window, a tool that alerts prudential regulators of possible liquidity mismanagement problems for an individual institution or, in some cases, could alert them of an emerging liquidity crisis that might cause widespread financial distress. On the other hand, the existence of an additional liquidity source such as the FHLB system may still act as a buffer for depositories and sustain financial market liquidity, thereby alleviating potential costs to taxpayers.

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¹³² See FHLB of Atlanta, "FHLBank Atlanta: Loan Collateral Resource Guide," at http://corp.fhlbatl.com/files/ documents/loan-collateral-resource-guide.pdf. For more information about the SBA's 7(a) loan guaranty program, see CRS Report R41146, *Small Business Administration 7(a) Loan Guaranty Program*, by Robert Jay Dilger.

¹³³ See 13 CFR 120.432(a).

¹³⁴ See Letter from Andre D. Galeano, deputy director of FHFA, to FHLBs presidents and chief executive officers, *Paycheck Protection Program (PPP) Loans as Collateral for FHLBank Advances*, April 23, 2020, at https://www.fhfa.gov/Media/PublicAffairs/PublicAffairsDocuments/PPP-Loans-as-Collateral-for-FHLBank-Advances.pdf. As described in the letter, FHFA allowed the FHLBs to accept PPP loans as collateral for advances after establishing certain conditions that included haircuts of 20%.

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